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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,415	08/20/2001	Charilaos Dalkidis	LNUP:107_US_	5726

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EXAMINER

ALEXANDER, LYLE

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,415

Applicant(s)

DALKIDIS ET AL.

Examiner

Lyle A Alexander

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4 and 6-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4 and 6-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 2,4,6,11-13,15-19 and 21-34 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Heid et al.

Heid et al. teach an automated apparatus(1) for treating cytological or histological specimens. Column 3 lines 8+ describe the apparatus(1) as computer controlled for automatically running stored and selected treatment programs. The programs provide instructed a transport device to move the samples to individual treatment stations, remove the sample after the appropriate residence time and transport to the next/new treatment station. Each treatment station is selected according to the specific computer program required. The computer control can be set up for the simultaneous, parallel course of different and/or like treatment programs. The apparatus has a housing(1a) with two openings(4,5) that act as loading or unloading stations. The computer processor(31), memory(32), display field(2) and keyboard(3) are all integrated with the apparatus(1). A basket with specimen holder baskets is inserted is inserted into the loading station and acts as a transport unit taking the sample to the appropriate treatment station (column 4 lines 1+). The treatments stations(6a-j) are arranged in a two dimensional array. Two horizontal guides(8a-b) facilitate sample transport to the treatment stations(6a-j). The transport device(33-36) has four drives and via interface cards(33-36) the exact position of transport device is known at all times.

The claimed "multiple processing stations" have been read on the taught treatment stations(6a-j) and the claimed "transport device" on the taught transport devices(33-36). The claimed "modular treatment stations" and "combined reception and connection regions each for receiving a corresponding treatment station" have been read on each station(6a-j) . Heid et al. teach each treatment station is selected according to the specific computer program and has been read on the claimed "permanently definable function".

Heid et al. teach specific placement of the treatment stations and interface cards(33-36) that define these locations of the treatment stations and permit controlled access to each station. This has been read on the claimed "region, coordinated with said processing stations".

Column 5 lines 9-12 teach the air can be evacuated from housing(1a) which has been read on the claimed "modular treatment station comprises a fan", "... an extraction system for extracting vapors" and "... a central extraction system ...".

The claimed "control system" has been read on the taught computer processor(31), memory(32), display field(2) and keyboard(3).

The claimed "robotic arm" that has "two parallel arm" that are "rotatable about a vertical shaft" and is "adjustable in height" has been read on the taught two horizontal linear guides(8a-b), movable cross bar(9), vertical guide(10) and movable slider(11).

Claims 2,4,6,11-13,17,19 and 21-34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Thiem et al. (USP 6,635,225).

Thiem et al. teach an automated apparatus for the cytological/histological staining of tissue samples comprising a transport basket(4) containing multiple slides(2), reagent containers(3), transport mechanism(6), transporting arms(24), sensors(12) and control/logic circuits(24/25). This has been read on the claimed multiple modular processing stations and transport device to move the sample in and out of the processing stations.

Claims 2,4,6-13,15-17,19 and 21-34 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Thiem et al. (USP 6,080,365).

Thiem et al. teach an automated apparatus(1) for the cytological/histological staining of tissue samples comprising a plurality of chemical containers(4), turntable(7), a central guide rod(8) with an electrical slip ring(25) power connector that facilitates suction means to evacuate the housing(3), and an object holders(6) to move the slides about within the apparatus(1). This has been read on the claimed multiple modular processing stations and transport device to move the sample in and out of the processing stations.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 7-10,14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heid et al. or Thiem et al. (USP 6,635,225)

See Heid et al. and Thiem et al. (USP 6,635,225)supra.

The art is silent to the claimed plug-like connector stem and electrical contacts on the treatment stations, covers for closing the unused access openings and a turbulence-inducing device.

The court decided In re Boesch (205 USPQ 215) that optimization of a result variable is ordinarily within the skill of the art. A result effective variable is one that has predictable and well-known effects.

Plug like connectors are well known in the art for mating elements securely in a desired orientation and as electric contacts. It would be desirable in a device to use plug like connectors to secure the various elements and use the plug design to only permit the desired elements to be placed in the proper orientations (e.g. the plug on the wrong part will not fit). It would have been within the skill of the art to modify Heid et al. or Thiem et al. (USP 6,635,225) and use a plug like connector to gain the expected and well-known results of secure unambiguous placement of the various elements and as electric contacts.

Heid et al. teaches covers (7a-j) to prevent evaporation of solvent from the containers. Covers are well known in the art to prevent evaporation of solvent and to minimize external contamination. It would have been within the skill of the art to further modify Heid et al. or Thiem et al. (USP 6,635,225) and use covers on the unused positions to gain the above advantages.

It is known in the art that turbulence or stirring of a solution is desirable to maintain active chemical species at the reaction interface to facilitate the maximum

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reaction. It would have been desirable to further modify Heid et al. or Thiem et al. (USP 6,635,225) and provide turbulence or stir the solution to gain the above advantages.

Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theim et al. (USP 6,080,365).

See Theim et al. (USP 6,080,365) *supra*.

Theim et al. (USP 6,080,365) is silent to covers for closing the unused access openings and a turbulence-inducing device.

The court decided In re Boesch (205 USPQ 215) that optimization of a result variable is ordinarily within the skill of the art. A result effective variable is one that has predictable and well-known effects.

Use of a cover to minimize external contamination is a result effective variable. It would have been within the skill of the art to modify Theim et al. (USP 6,080,365) and use covers on the unused positions to gain the above advantages.

It is known in the art that turbulence or stirring of a solution is desirable to maintain active chemical species at the reaction interface to facilitate the maximum reaction. It would have been desirable to further modify Theim et al. (USP 6,080,365) and provide turbulence or stir the solution to gain the above advantages.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

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1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2,4 and 6-34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-43, 1-32, 1-26 and 1-28 of copending Applications No. 09/932,900, 09/793,199, 10/011,674 and 09/932,889 respectively. Although the conflicting claims are not identical, they are not patentably distinct from each other because both are directed to a similar histological apparatus having multiple processing stations, a transport device, loading station and a removal station.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments filed 9/20/04 have been fully considered but they are not persuasive.

Applicants' argue Heid et al., Thiem et al.('225) and Thiem et al.('365) fail to teach the presently claimed stations that have at least one permanently defined function other than containment of the fluid. The method of intended use of an apparatus is of no patentable moment with respect to pending apparatus claims. The cited prior art teaches stations that are indistinguishable from the claimed structures. The structures

of the prior also have the capability of being used for other functions. It is suggested Applicants claim the appropriate means to perform these other functions. If such amendments were submitted after the final rejection, they may not be entered as they would require further consideration and search.

Applicants also state the cited prior art fails to teach the claimed "removable" feature. In the absence of claiming a specific structure to accomplish this act, the Office maintains removable is such as broad term, that about any structure is capable of meeting this limitation (e.g. any structure could be removed).

Applicants traverse the 35 USC 103 rejections on the basis there is no motivation, other than impermissible hindsight, to make the combinations. The Office does not agree. It is routine to supply electric contacts, covers and means to stir (e.g. turbulence) to devices to achieve the expected and well-known results.

Applicants traverse the Double Patenting rejections arguing the instant application does not teach the specific limitations of the other references. Specifically, Applicants state 09/932,900 requires the processing stations to be selected by the user. The instant claims meet this limitation because the selection of the processing stations of the instant invention is determined by the users' need (e.g. the device is designed to perform the functions desired by the user).

Applicants state 09/793,199 teaches a transponder and control unit for controlled transporting of the slides. The instant invention teaches a "transport device" that accomplishes the same function and is indistinguishable.

Applicants state 10/011,674 teaches an "insert" that fits into the container to reduce the capacity of the container. The instant claims are sufficiently broad, they would encompass this limitation.

Applicants state 09/932,889 teaches a "gripper" that moves the objections. The instant claims are sufficiently broad, they would encompass this limitation.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday, Wednesday and Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lyle A Alexander
Primary Examiner
Art Unit 1743
